DOCUMENT RESUME

ED 452 749 HE 033 964

TITLE	A Guide to the 2001 Research Assessment Exercise.
INSTITUTION	Higher Education Funding Council for Wales, Cardiff.; Higher Education Funding Council for England, Bristol.; Scottish Higher Education Funding Council, Edinburgh.
PUB DATE	2001-00-00
NOTE	15p.; Also produced by the Department of Higher and Further Education, Training and Employment for Northern Ireland.
AVAILABLE FROM	Higher Education Funding Council for England, Northavon House, Coldharbour Lane, Bristol, BS16 1QD, England. Tel: 0117-931-7035; Fax: 0117-931-7463; Web site: http://www.hefce.ac.uk.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Evaluation Methods; *Financial Support; Foreign Countries; Higher Education; *Peer Evaluation; Program Evaluation; *Research; Research Universities; *Resource Allocation
IDENTIFIERS	*United Kingdom

ABSTRACT

This booklet explains the Research Assessment Exercise (RAE) for universities in the United Kingdom receiving public funds and outlines how it works. It also includes some facts and figures and sources of further information. The RAE, which operates through a process of peer review by experts, is designed to provide ratings of the quality of research conducted at universities and higher education colleges in the United Kingdom. The ratings are used to inform the allocation of funds, and more than 1 billion British pounds are allocated each year for research using the results of the RAE. The RAE measures research quality, not only to enable the allocation of funds, but also to promote high quality in research. The outcomes of the exercise are published to provide public information on the quality of research, and the results of the RAE may be used to inform policy development. Every higher education institution in the United Kingdom may make a submission to as many of the units of assessment as they choose. In the 2001 RAE, there are 68 units of assessment, with 60 assessment panels, since a few units of assessment have joint panels. Panel members are nominated by a wide range of organizations and then selected by funding bodies. The information supplied by the institution is the basis on which judgments are made, and subject panels use a standard scale to award a rating for each submission. Appendixes (annexes) contain a glossary, a list for further reading, and a list of the units of assessment. (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 452 749

A Guide to the 2001 Research Assessment Exercise

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

R. Kier

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RAE

RE033964

BEST COPY AVAILABLE

RAE 2001 facts and figures

- **3,204** nominations were received for panel membership from over **400** bodies
- **685** panel members were appointed
- Some **2,500** submissions will be assessed, covering the work of around **56,000** researchers
- Almost **250,000** pieces of research work are expected to be cited in submissions
- The first RAE was carried out in 1986. The current one is the **fifth**
- Approximately **£1 billion** of research funding is allocated each year using the results of the RAE
- Full details of the RAE are on the web at: *www.rae.ac.uk*

BEST COPY AVAILABLE

A Guide to the 2001 Research Assessment Exercise

Contents

Introduction 2

- Funding Research
- The Research Assessment Exercise
- Why Fund Research in this Way?

How the RAE is Carried Out 3

- Overview
- Units of Assessment
- Assessment Panels
- What Information is Provided by Universities and Colleges?
- Assessment Period and Census Date
- How do the Panels Make their Judgements?
- What are the Ratings?
- How are the Ratings Used to Allocate Funding?
- Interdisciplinary and Collaborative Research
- Timetable
- Publishing the Results

Further Information 7

- Contacts

Annex A: Glossary of Terms 8

Annex B: Further Reading 9

Annex C: Units of Assessment 10

BUSAJAVA Y100 T255

A Guide to the 2001 Research Assessment Exercise

Introduction

Funding Research

Research is fundamental to the development of knowledge and understanding, and for wealth creation. Public funding for research in universities and higher education colleges in the UK is provided under the 'dual support' system whereby:

- funding for the research infrastructure (staff salaries, premises, computing and library costs, for example) is provided by the four UK funding bodies, while
- the costs of individual research projects are funded by the six Research Councils and the Arts and Humanities Research Board.

Universities and colleges also attract funds for research from other sources, including business and industry, government departments and the devolved administrations, charities and the European Commission.

The purpose of the Research Assessment Exercise (RAE) is to provide ratings of the quality of research conducted in universities and higher education colleges in the UK. The ratings are used to inform the allocation of funds. Over £1 billion per year is allocated by the funding bodies for research using the results of the RAE.

Research funds are allocated selectively in accordance with the quality of the work being undertaken. The RAE measures research quality in order to determine where funds should be applied. The research submitted is assessed against a benchmark of international excellence in the subject concerned. The system is designed to maintain and develop the strength and international competitiveness of the research base in universities and other higher education institutions in the UK.

The Research Assessment Exercise

To enable selective funding , the funding bodies assess the quality of research taking place in universities and higher education colleges by undertaking a Research Assessment Exercise (RAE). This RAE provides quality ratings for all subjects in which research is carried out, and these ratings are used in the process to determine funding. The RAE is carried out periodically – the last one was in 1996; the results of the current one will be published at the end of 2001.

The purpose of the RAE is not just to enable funding to be allocated selectively but also to promote high quality: research in higher education institutions conducting the best research receive the largest proportion of grant. The outcomes of the exercise are published to provide public information on the quality of research in higher education throughout the UK. The results of the RAE may also be used to inform policy development. The RAE is only concerned with research; there is a separate system to assess the quality of learning and teaching in higher education.

This guide aims to explain the purpose of the RAE and how it works. It also includes some facts and figures and sources of further information.

Why Fund Research in this Way?

The first RAE was held in 1986 when the policy of selective funding was introduced by government. Since then the process has been developed and refined in consultation with universities and colleges. The process is becoming more open and transparent with each successive exercise.

The policy of selective funding for research has contributed to improvements in the quality of research in the UK. A recent study commissioned by HEFCE into the role of selectivity concluded that:

- in the period since the first RAE in 1986 the effectiveness and productivity of the UK research base has increased substantially. UK researchers are among the most productive, and the number of times their work is read and used by other academics per million pounds spent is the highest in the world;

- the introduction of a national system for the assessment of research quality has been effective in significantly increasing the conscious management of the research environment;
- research activity in the UK has increased at a faster rate than funding, indicating an increase in efficiency.

How the RAE is Carried Out

Overview

The RAE operates through a process of peer review by experts of high standing covering all subjects. Judgements are made using the professional skills, expertise and experience of the experts; it is not a mechanistic process. All research assessed is allocated to one of 68 'units of assessment' (UoA) which are discipline-based. For each unit of assessment there is a panel of between nine and 18 experts, mostly from the academic community but with some industrial or commercial members as well.

Every higher education institution in the UK may make a submission to as many of the units of assessment as they choose. Such submissions consist of information about the academic unit being assessed, with details of up to four publications and other research outputs for each member of research-active staff. The assessment panels award a rating on a scale of 1 to 5*, according to how much of the work is judged to reach national or international levels of excellence (see table, page 5).

Units of Assessment

There are 68 units of assessment in the 2001 RAE, which are listed at Annex C. Each unit covers a broad subject area. For example, Mechanical, Aeronautical and Manufacturing Engineering are included within one unit; Drama, Dance and Performing Arts are all included in another. The units of assessment have been identified in consultation with the higher education sector and continue to evolve to reflect changes in the pattern of research in institutions.

Assessment Panels

There are 60 assessment panels; usually there is one panel for each unit of assessment but a few units of assessment have joint panels. The panel chairs were nominated by members of the 1996 RAE panels and appointed jointly by the four funding bodies. Panel members are nominated by a wide range of organisations, including research associations, learned societies, professional bodies and those representing industrial, business and other users of research. Panel members are then selected by the funding bodies, on the advice of the panel chair, based on their research experience and standing in the research community, so as to ensure coverage of the subject concerned. The funding bodies also seek to reflect the profile of nominations received in terms of geographical coverage, gender, and type of institution. The chair and members of each panel participate as individuals, rather than as representatives of a particular group or interest. The names of the panel chairs and members are published.

Nearly half of the panels have established sub-panels; these often include people who are not members of the main panel. The sub-panels advise on assessment of research in particular sub-areas within the subject. Panels may also draw on the advice of specialists covering specific areas of expertise outside the panel's experience. In addition, all panels consult with advisers based outside the UK to confirm their application of the standard of international excellence which is the benchmark for the exercise.

What Information is Provided by Universities and Colleges?

Each publicly funded university and higher education college in the UK is invited to submit information about their research activity for assessment. The information they supply provides the basis on which judgements are made. Submissions have to be in a standard format, which includes qualitative and quantitative information. Most of the information is provided electronically on specially written software.

The submissions are based around members of staff in each academic unit in which the institution is submitting. It is up to each institution to decide which subjects (and therefore which units of assessment) to submit to, and which members of staff to include in each submission.

For each member of research staff, up to four items of research output may be listed. All forms of research output (books, papers, journals, recordings, performances) are treated equally; panels are concerned only with the quality of the research. Similarly, all research (whether applied, basic or strategic) is treated equally. In addition, the HEI must provide information in a number of different categories (shown in the table below).

Information provided for the RAE on each unit of assessment submitted

Category	Description
Staff information	• summaries of all academic staff • details of research-active staff • research support staff and research assistants
Research output	• up to four items of research output for each researcher
Textual description	• information about the research environment, structure and policies • strategies for research development • qualitative information on research performance and measures of esteem
Related data	• amounts and sources of research funding • numbers of research students • number and sources of research studentships • numbers of research degrees awarded • indicators of peer esteem

Assessment Period and Census Date

The 2001 RAE uses a census date of 31 March 2001 to capture a 'snapshot' of all staff who are in post on that date. The census date determines the staff who are eligible to be included in the submissions of each institution. The RAE assesses the quality of research output by eligible staff over a period of seven years for arts and humanities subjects and five years for all other subjects.

The deadline for institutions' submissions is 30 April 2001. The month between the census date and the submission date allows institutions time to finalise their submissions, although they are provided with the details of the submission requirements at least 12 months before each RAE.

The actual research outputs do not all have to be submitted, but must be made available to assessment panels on request.

How do the Panels Make their Judgements?

The panels use their professional judgement to form a view of the overall quality of the research in each submission within their unit of assessment, using all the evidence presented in the submission.

To assess submissions fairly and consistently within each UoA, each panel draws up a statement describing its working methods and assessment criteria. These are published in advance of submissions being made. This statement shows which aspects of the submission the panel regards as most important, and areas that it wants institutions to comment on in their submissions. The differences in working methods and criteria between panels are a reflection of the need to recognise differences in the way research is conducted and published in the various disciplines.

Panels review all submissions, and read selectively from the research outputs cited. Because the panels are concerned with quality, not quantity, information on the total number of publications produced is not requested. Panels do not visit institutions as part of their work.

What are the Ratings?

The subject panels use a standard scale to award a rating for each submission. Ratings range from 1 to 5*, according to how much of the work is judged to reach national or international levels of excellence. The table below shows the definition of each rating.

The Rating Scale

Rating	Description
5* (5 star)	Quality that equates to attainable levels of international excellence in more than half of the research activity submitted and attainable levels of national excellence in the remainder
5	Quality that equates to attainable levels of international excellence in up to half of the research activity submitted and to attainable levels of national excellence in virtually all of the remainder
4	Quality that equates to attainable levels of national excellence in virtually all of the research activity submitted, showing some evidence of international excellence
3a	Quality that equates to attainable levels of national excellence in over two-thirds of the research activity submitted, possibly showing evidence of international excellence
3b	Quality that equates to attainable levels of national excellence in more than half of the research activity submitted
2	Quality that equates to attainable levels of national excellence in up to half of the research activity submitted
1	Quality that equates to attainable levels of national excellence in none, or virtually none, of the research activity submitted

How are the Ratings Used to Allocate Funding?

Each of the four funding bodies uses the ratings to allocate research funding by formula to the institutions it funds. The formulae used by each funding body may differ, with the overlying principle of funding selectively – more funding for higher quality research. For example, in 2000-01, the HEFCE allocates no funding for a rating of 1 or 2, while a rating of 5* attracts approximately four times as much funding as a rating of 3b for the same volume of research activity.

The main way of measuring the volume of research is by the number of research active staffed submitted to the RAE for assessment.

Interdisciplinary and Collaborative Research

The RAE recognises the importance of interdisciplinary research between subjects and collaborative research carried out by researchers within and between different institutions. Each panel makes an explicit statement about interdisciplinary research in its assessment criteria. Furthermore, there are arrangements for panels to share expertise when considering interdisciplinary research. A number of umbrella groups of panel chairs in cognate areas oversee the assessment of interdisciplinary work.

A wide-ranging study of the 1996 RAE concluded that there was no evidence that interdisciplinary work was systematically disadvantaged by the process.

Timetable

Work on the 2001 RAE started in 1997 with a consultation with the HE sector on the approach to the exercise. It will end with the publication of the ratings and feedback reports in late 2001 and early 2002. The main dates are shown in the table below.

Year	Month	Activity
1999	Spring	Funding bodies announce: • details on preparing submissions, data requirements and definitions • number and definition of units of assessment • number and membership of panels
	Summer	Panels consult subject communities on draft criteria
	End	Publish agreed criteria and working methods
	October to March 2000	HEIs' evaluation of pilot data collection software
2000	July	Issue software and manual to HEIs
	September-October	Detailed survey of HEIs' submission intentions
	31 December	Deadline for eligible output
2001	31 March	Census date
	30 April	Submission date
	May to October	Panels meet to assess submissions
	End October	Panels report grades to funding bodies
	Late December	Ratings published
2002	January-February	Feedback reports published

Publishing the Results

The ratings from the 2001 RAE will be published at the end of December 2001. These will be used to inform funding from 2002-03 onwards. In addition to the ratings, a general report on each unit of assessment will be published, and feedback on each submission will be sent to the individual institutions in confidence.

Further Information

Extensive information about the RAE is available on the RAE web-site *www.rae.ac.uk*. The main publications describing the RAE are given in Annex B.

Contacts

The 2001 RAE is administered on behalf of the funding bodies by a team based in the HEFCE's offices in Bristol.

John Rogers	RAE Manager
	Tel: (0117) 931 7237
Anita Jackson	Deputy RAE Manager
	Tel: (0117) 931 7260
Greg Williams	RAE Officer
	Tel: (0117) 931 7003
Becki Witts	RAE Administration Officer
	Tel: (0117) 931 7293
Faye Tierney	RAE Team Secretary
	Tel: (0117) 931 7012

RAE Team, Northavon House, Coldharbour Lane, Bristol, BS16 1QD

E-mail: *rae@hefce.ac.uk*

Annex A

Glossary of Terms

Dual support

The system of funding research in the UK, in which funding is provided through two sources – for infrastructure by the UK funding bodies and for projects by the Research Councils and the AHRB.

Funding bodies

The four UK higher education funding bodies: Higher Education Funding Council for England (HEFCE); Scottish Higher Education Funding Council (SHEFC); Higher Education Funding Council for Wales (HEFCW); and for Northern Ireland, the Department of Higher and Further Education, Training and Employment (DHFETE).

Research

The definition of research which applies in the RAE is given below.

'Research' is to be understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce and industry, as well as to the public and voluntary sectors; scholarship*; the invention and generation of ideas, images, performances and artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and analysis of materials, components and processes, eg for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

** Scholarship for the RAE is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases.*

Research Councils

There are six subject-specific Research Councils. They are funded by the Government through the Office of Science and Technology to support research in their own establishments and to fund research projects in universities. Research is also funded by the Arts and Humanities Research Board.

Unit of Assessment

A unit of assessment (UoA) is a broad subject within which research is assessed. There are 68 UoAs in the 2001 RAE.

Annex B

Further Reading

Circulars

RAE 1/01 – Membership of Assessment Panels and Sub-Panels

RAE 5/00 – Guidance to completing RAE forms

RAE 4/00 – Development Studies Sub-Panel: Membership, assessment criteria and working methods statement

RAE 3/00 – Data Checking and Verification Arrangements

RAE 2/00 – Corrections to Assessment panels' criteria and working methods

RAE 1/00 – Application to make a multiple submission

RAE 5/99 – Assessment panels' criteria and working methods

RAE 4/99 – Consultation on assessment panels' criteria and working methods

RAE 3/99 – Membership of Assessment Panels

RAE 2/99 – Guidance on Submissions

RAE 1/99 – Interdisciplinary Research and the RAE

RAE 4/98 – Chairs of Unit of Assessment Panels

RAE 3/98 – RAE 2001 and health-related research: consultation

RAE 2/98 – Research Assessment Exercise 2001: bodies to nominate panel members

RAE 1/98 – Research Assessment Exercise in 2001: key decisions and issues for further consultation

Briefing Notes

Briefing Note 15 – Mapping Textual Commentary onto the RAE Data Application

Briefing Note 14 – Interdisciplinary Research and the RAE

Briefing Note 13 – Language Teaching Materials in RAE Submissions

Briefing Note 12 – Assessment of Clinical Medicine: Sub-Panel Grades

Briefing Note 11 – Additional information fields for UoA 68 (Education) submissions

Briefing Note 10 – Joint Infrastructure Fund Research Assessment Exercise

Briefing Note 9 – Publication of Research Assessment Exercise Results

Briefing Note 8 – Part-time contract staff in the visual and performing arts

Briefing Note 7 – Sources of salary for research active staff

Briefing Note 6 – Statistics and Operational Research, UoA24: Textual commentary

Briefing Note 5 – Confidential Research Outputs

Briefing Note 4 – Research Outputs

Briefing Note 3 – Category A* Staff

Briefing Note 2b – Research Studentships

Briefing Note 2a – Research Students

Briefing Note 1 – Research Income: European funding

Task Group Reports

Report from the Joint Department of Health/HEFCE task group on Health-related Research and the RAE

Report of the work of the RAE 2001 Task Group on Education Research

Report of the work of the Joint Funding Bodies/CBI Task Group on User/Industrial Participation in the RAE 2001

Briefing Papers

Nomination of Welsh Language Advisers

Interdisciplinary Research and the RAE

Annex C

Units of Assessment

All research assessed in the RAE is allocated to one of 68 units of assessment, each of which covers a broad subject area.

1. Clinical Laboratory Sciences
2. Community-based Clinical Subjects
3. Hospital-based Clinical Subjects
4. Clinical Dentistry
5. Pre Clinical Studies
6. Anatomy
7. Physiology
8. Pharmacology
9. Pharmacy
10. Nursing
11. Other Studies and Professions Allied to Medicine
12. **Discontinued for 2001**
13. Psychology
14. Biological Sciences
15. Agriculture
16. Food Science and Technology
17. Veterinary Science
18. Chemistry
19. Physics
20. Earth Sciences
21. Environmental Sciences
22. Pure Mathematics
23. Applied Mathematics
24. Statistics and Operational Research
25. Computer Science
26. General Engineering
27. Chemical Engineering
28. Civil Engineering
29. Electrical and Electronic Engineering
30. Mechanical, Aeronautical and Manufacturing Engineering
31. Mineral and Mining Engineering
32. Metallurgy and Materials
33. Built Environment
34. Town and Country Planning
35. Geography
36. Law
37. Anthropology
38. Economics and Econometrics
39. Politics and International Studies
40. Social Policy and Administration
41. Social Work
42. Sociology
43. Business and Management Studies
44. Accountancy
45. American Studies
46. Middle Eastern and African Studies
47. Asian Studies
48. European Studies
49. Celtic Studies
50. English Language and Literature
51. French
52. German, Dutch and Scandinavian Languages
53. Italian
54. Russian, Slavonic and East European Languages
55. Iberian and Latin American Languages

56. Linguistics
57. Classics, Ancient History, Byzantine and Modern Greek Studies
58. Archaeology
59. History
60. History of Art, Architecture and Design
61. Library and Information Management
62. Philosophy
63. Theology, Divinity and Religious Studies
64. Art and Design
65. Communication, Cultural and Media Studies
66. Drama, Dance and Performing Arts
67. Music
68. Education
69. Sports-related Subjects

Department of
Higher and Further Education,
Training and Employment
for Northern Ireland

Northavon House Coldharbour Lane BRISTOL BS16 1QD
http://www.niss.ac.uk/education/hefc/rae2001/

BEST COPY AVAILABLE